

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q75615

Mathieu BARQUIN, et al.

Appln. No.: 10/609,633

Group Art Unit: 2617

Confirmation No.: 4950

Examiner: Khai Minh NGUYEN

Filed: July 1, 2003

For: METHOD FOR PROVIDING SERVICE MANAGEMENT TO NETWORK ELEMENTS  
OF A CELLULAR COMMUNICATION NETWORK

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

**Table of Contents**

I. REAL PARTY IN INTEREST.....	2
II. RELATED APPEALS AND INTERFERENCES .....	3
III. STATUS OF CLAIMS.....	4
IV. STATUS OF AMENDMENTS.....	5
V. SUMMARY OF THE CLAIMED SUBJECT MATTER .....	6
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	9
VII. ARGUMENT .....	10
CLAIMS APPENDIX .....	17
EVIDENCE APPENDIX: .....	20
RELATED PROCEEDINGS APPENDIX.....	21



**I. REAL PARTY IN INTEREST**

The real party in interest in this appeal is Evolium S.A.S. Assignment of the application was recorded in the U.S. Patent and Trademark Office on July 1, 2003 at Reel 014269, Frame 0821.



**II. RELATED APPEALS AND INTERFERENCES**

There are no known appeals or interferences that will affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.



**III. STATUS OF CLAIMS**

Claims 1-8 are all of the claims pending in the application and are the subject of this appeal. Claims 1-8 are rejected under 35 U.S.C § 103(a) as being unpatentable over Hirsch (U.S. Patent Application Publication No. 2003/0162537) in view of Niklasson (U.S. Patent Application Publication No. 2003/0179772). All of the claims are set forth in the attached Appendix.



**IV. STATUS OF AMENDMENTS**

No claim amendments were requested subsequent to the October 10, 2006 Office Action.



**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The claimed invention is directed to a method for providing service management to network elements in a cellular communication network, and to a method for controlling the data exchange format between the network elements and an Operation and Maintenance Center of the cellular communication network.

Network elements (21 and 22 of figure 2) and an Operation and Maintenance Center (23) which may include a mediation server (231) and a module (232) for providing common management functionality, are provided in a cellular network. The network elements respectively use a first and second data exchange format for communicating with the Operation and Maintenance Center (Specification at page 5, lines 4-6). If the Operation and Maintenance Center is handling several network elements using different data formats, the mediation server identifies a change in the data exchange format used by each network element (Specification at page 5, lines 14-18). Upon identifying the change in data exchange format, the mediation server dynamically switches from an old data exchange format to a new identified data exchange format with performing a restart or reboot at the Operation and Maintenance Center (Specification at page 5, lines 14-23).

Several meditation servers may be used to handle traffic or the transmission of data between the network elements and the Operation and Maintenance Center. The mediation server has means 31 for detecting or identifying a change in the used data exchange format. Upon reception and identification of data over the interface 33, means 31 checks if the received data



exchange format matches with a previously stored data exchange format. If it does not match a previously stored data exchange format, means 32 dynamically switches from an old data exchange format to a new identified data exchange format (Specification at page 6, lines 15-26). The switching is done without restarting or rebooting the Operation and Maintenance Center, thereby preventing interruption of the service provided by the Operation and Maintenance Center. (Specification at page 5, lines 14-23).

Independent claim 1 is directed to a method for providing service management to network elements of a cellular communication network (Specification at page 1, lines 10-13; page 2, line 26 to page 3, line 8 and Figure 2), the network elements communicating with an Operation and Maintenance Center of the cellular network by sending data having a data exchange format (Specification at page 5, lines 4-10), the data exchange format being translated in an Operation and Maintenance Center specific data format at a mediation server (Specification at page 5, line 14 to page 6, line 26). Claim 1 requires “identifying at the mediation server a change in the used data exchange format from a first data exchange format to a second data exchange format” (Specification at page 5, lines 14-23), and “dynamically switching from the first data exchange format to the second identified data exchange format” (Specification at page 5, lines 14-23 and page 6, lines 10-26).

Independent claim 5 is directed to “a mediation server used for translating a first data exchange format used by a network element of a cellular communication network to a second data exchange format used by an Operation and Maintenance Center.” (Specification at page 5, lines 4-23 and page 6, lines 4-26), where the mediation server comprises means 31 for



identifying a change from the first data exchange format to the second data exchange format (Specification at page 6, lines 10-26 and Figure 3), and means 32 for dynamically switching from the first data exchange format to the second identified data exchange format (Specification at page 6, lines 10-26 and Figure 3).



**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Rejection of claims 1-8 under 35 U.S.C § 103(a) as being unpatentable over Hirsch in  
view of Niklasson.



## VII. ARGUMENT

Appellant respectfully submits that claims 1-8 would not have been rendered obvious in view of the combination of Hirsch and Niklasson because the combined references do not teach or suggest all of the features of the claimed invention, and one skilled in the art would not have been motivated to modify the system of Hirsch to produce the claimed invention based on the teachings of Niklasson.

Independent claim 1 is directed to “a method for providing service management to network elements of a cellular communication network.” Claim 1 recites “identifying at said mediation server a change in said used data exchange format from a first data exchange format to a second data exchange format; and dynamically switching from said first data exchange format to said second identified data exchange format.”

Hirsch generally relates to communication system devices for updating information in an object oriented, hierarchical communications system with at least two administrative levels via a producer-independent interface between a producer-independent managing device and at least one Operation and Maintenance Center (see the Abstract and paragraphs [0035-0041]). The teaching allows for the processing of fault information at intervals when agent devices do not carry out these tasks (paragraphs [0021-0023]), and for the updating of proprietary hardware information at a multi vendor interface or non-proprietary Operation and Maintenance Center interface in a mobile radio network (paragraph [0015]).

Appellant respectfully submits that there is no teaching or suggestion in Hirsch of network elements communicating with an Operation and Maintenance Center of said cellular



communication network by sending data having a data exchange format, as recited in independent claim 1. The Examiner cites FIG. 1, OMCs, management center NMC, and paragraphs [0004-0006 and 0034] of Hirsch as allegedly disclosing this feature of the claim. Appellant respectfully disagrees with the Examiner's interpretation of Hirsch.

Paragraph [0034] of Hirsch merely discloses that the operation and maintenance center (OMC) communicates with a base station subsystem (BSS). Nowhere does Hirsch disclose that the BSS sends data having a data exchange format to the OMC.

The Examiner also asserts that Hirsch discloses that the data exchange format is translated in an OMC specific data format at a mediation server, and again cites FIG. 1, OMCs, management center NMC and paragraphs [0004-0006 and 0034] as allegedly disclosing this feature of the claim. Appellant respectfully disagrees.

There is simply no disclosure in Hirsch of a mediation server within the OMC as required by claim 1. Hirsch merely discloses that the OMC performs configuration management which enables the structure of the network to be changed (paragraph [0034]). Nowhere does Hirsch disclose network elements communicating with an Operation and Maintenance Center of the cellular communication network by sending data having a data exchange format, the data exchange format being translated in an Operation and Maintenance Center specific data format at a mediation server, as required by independent claim 1.

The Examiner acknowledges that Hirsch fails to teach "identifying at said mediation server a change in said used data exchange format from a first data exchange format to a second data exchange format; and dynamically switching from said first data exchange format to said



second identified data exchange format” as required by claim 1. The Examiner thus relies on Niklasson to allegedly cure this deficiency and submits that it would have been obvious to combine these references. Again, Appellant respectfully disagrees with the Examiner’s position.

First, Appellant submits that Niklasson has no relevance to the claimed invention. The Niklasson system 700 receives information/data from one of the communication networks (for example, network 1). This data is converted via the data transmission unit 310 into the system internal data format of system 700 (paragraph [0038]). This data is subsequently sent to a data transmission unit (for example, unit 320) where it is converted from the system internal data into the format of the target communication network 2 (paragraph [0044]).

Thus, Niklasson’s system 700 is used to allow one network (mobile telephone network 1) to communicate with another network (fixed network for telephone and facsimile transmissions 2), by converting the data from the source network into a system internal data format, and then into the format of the target network. In other words, Niklasson is directed to inter-network communications.

On the other hand, the claimed invention is directed to a “method for providing service management to network elements of a communication network,” wherein the network elements communicate with an Operation and Maintenance Center of the communication network. In other words, intra-network communications. This is contrary to the teachings of Niklasson, which focuses on communications between plural communication networks, and is directed to the broader aspect of having a cellular communication system communicating with other types of networks.



There is no disclosure of having any of the components in Niklasson placed within a cellular network, as in the claimed invention. In fact, as disclosed in paragraphs [0028] and [0030], Niklasson indicates that the relative components of the system can and should be located remotely from any of the networks 1, 2, or 3.

Further, Niklasson does not teach, disclose or suggest identifying at said mediation server a change in said used data exchange format from a first data exchange format to a second data exchange format, and dynamically switching from said first data exchange format to said second identified data exchange format, as recited in independent claim 1. The Examiner cites FIG. 1, the Abstract, and paragraphs [0010] and [0012] of Niklasson as allegedly disclosing this feature of the claimed invention. However, there is simply no disclosure of these features in the cited sections. Paragraph [0010] merely discloses providing a process and a system for information and data exchange between communication networks. Paragraph [0012] of Niklasson merely discloses the conversion of the information from the source network to an internal data format. Niklasson does not identify a change in used data exchange format from a first data exchange format to a second data exchange format, and dynamically switch from the first data exchange format to the identified data exchange format.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify or combine the reference teachings. “To support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to



have been obvious in light of the teachings of the reference.” *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

However, in the present case the Examiner has not provided any objective reasoning why one of ordinary skill in the art would have been motivated to modify Hirsch in view of Niklasson, but instead merely asserts that it would have been obvious to one of ordinary skill in the art “to apply the teaching of Niklasson to Hirsch to provide a method for providing a process and a system for information and data exchange between communication networks.”<sup>1</sup>

Moreover, the Examiner does not address how one of ordinary skill in the art would have been able to modify Hirsch in view of Niklasson to produce the claimed invention. Hirsch and Niklasson are directed to network-to-network communication, and Appellant submits that the combination of these references would not teach a skilled artisan to use the Hirsch and Niklasson communications methods within a single network. In fact, there is no teaching at all that such a communication methodology would work **within** a network, as opposed to network-to-network communications to which Hirsch and Niklasson are directed.

Thus, absent any evidence at all that the Examiner’s combination of references could overcome, or even address this issue, there is no motivation to combine the two teachings, and, indeed, no indication whatever that the two references could be successfully combined, even if one skilled in the art were to attempt to do so. A proper §103 rejection requires both of these indicators, i.e., motivation to combine and a reasonable expectation of success. For this reason,

---

<sup>1</sup> Page 5 of the Office Action dated October 10, 2006.



the Examiner's §103 rejection clearly fails. Dependent claims 2-4 should also be allowable at least by virtue of their dependence on independent claim 1.

Independent claim 5 has features analogous to claim 1. For example, claim 5 recites:

a mediation server used for translating a first data exchange format used by a network element of a cellular communication network to a second data exchange format used by an Operation and Maintenance Center, wherein the mediation server comprises;

means for identifying a change from said first data exchange format to said second data exchange format; and

means for dynamically switching from said first data exchange format to said second identified data exchange format.

For the same reasons discussed above with regard to claim 1, Appellant respectfully submits that claim 5 would not have been rendered obvious in view of Hirsch and Niklasson because the cited references, alone or in combination, do not teach or suggest all of the features of the claimed invention, and one skilled in the art would not have been motivated to modify the system of Hirsch to produce the claimed invention based on the teachings of Niklasson. Accordingly, Appellant respectfully submits that claim 5 and its dependent claims 6-8, are patentable over the cited references for at least the same reasons mentioned for claim 1.

In view of the foregoing, Appellant respectfully submits that the rejection of claims 1-8 should be reversed.



APPEAL BRIEF UNDER 37 C.F.R. § 41.37  
U.S. Appl. No. 10/609,633

Attorney Docket No.: Q75615

Please apply the previously paid fee required under 37 C.F.R. §41.37(a) and 1.17(c), for the Appeal Brief filed May 19, 2006 to the fee required for the instant Appeal Brief.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Mark E. Wallerson  
Registration No. 59,043

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: January 23, 2007



**CLAIMS APPENDIX**

**CLAIMS 1-8 ON APPEAL:**

1. (previously presented): A method for providing service management to network elements of a cellular communication network, said network elements communicating with an Operation and Maintenance Center of said cellular communication network by sending data having a data exchange format, said data exchange format being translated in an Operation and Maintenance Center specific data format at a mediation server, wherein said method comprises:

identifying at said mediation server a change in said used data exchange format from a first data exchange format to a second data exchange format; and

dynamically switching from said first data exchange format to said second identified data exchange format.

2. (previously presented): The method according to claim 1, wherein said method further comprises:

representing said second data exchange format as a class in an object oriented program;  
and

dynamically uploading the class using the Java programming language to switch from said first data exchange format to said second data exchange format.



3. (previously presented): The method according to claim 1, wherein the method further comprises:

selecting one of a plurality of mediation servers for handling information from at least one of said network elements according to a predefined load balancing policy.

4. (previously presented): The method according to claim 1, wherein said data exchanged between at least one of said network elements and said Operation and Maintenance Center contains a new software version download from the Operation and Maintenance Center to said at least one of said network elements.

5. (previously presented): A mediation server used for translating a first data exchange format used by a network element of a cellular communication network to a second data exchange format used by an Operation and Maintenance Center; wherein said mediation server comprises:

means for identifying a change from said first data exchange format to said second data exchange format;

means for dynamically switching from said first data exchange format to said second identified data exchange format.



6. (previously presented): The mediation server according to claim 5, wherein said means for dynamically switching from said first data exchange format to said second identified data exchange format uses the Java programming language.

7. (previously presented): The mediation server according to claim 5, wherein the mediation server is a software component part of said Operation and Maintenance Center.

8. (previously presented): The mediation server according to claim 5, wherein the mediation server is a software component on a stand alone device connectable to said Operation and Maintenance Center.



**EVIDENCE APPENDIX:**

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other similar evidence.



APPEAL BRIEF UNDER 37 C.F.R. § 41.37  
U.S. Appl. No. 10/609,633

Attorney Docket No.: Q75615

**RELATED PROCEEDINGS APPENDIX**

There are no related proceedings.